

### **INTERVIEW SUMMARY**

On January 13, 2005, the examiner and the undersigned attorney discussed the primary reference and the rejection of claim 1. In particular, limitation (c) of claim 1 was discussed in relation to Getchius et al., Generic Object for Rapid Integration of Data Changes, U.S. Patent 6,496,843 (Dec. 17, 2002) was discussed. No agreement was reached.

### **REMARKS**

Claims 1-57 are pending in the present application. Reconsideration of the claims is respectfully requested.

#### **I. Obviousness Rejection of Claims 1-5, 7-11, 13-17, 19-22, 24-30, 32-36, 38-43, 45-47, 49-57**

The examiner has rejected claims 1-5, 7-11, 13-17, 19-22, 24-30, 32-36, 38-43, 45-47, 49-57 under 35 U.S.C. § 103(a) as being unpatentable over Getchius et al., Generic Object for Rapid Integration of Data Changes, U.S. Patent 6,496,843 (Dec. 17, 2002) in view of Bauer et al., System for Synchronizing Shared Data Between Computers, U.S. Patent 5,884,325 (Mar. 16, 1999). This rejection is respectfully traversed.

#### **I.A Basis of Rejection of Claim 1**

Regarding claim 1, the examiner states that

Getchius teaches the steps of:

- storing a first plurality of values in at least one first object, said first plurality of values comprising initial values of a plurality of data fields in a document (Getchius, col. 5, lines 15-36; col. 10, lines 14-40; col. 39, lines 1-10; col. 44, lines 35-53; and corresponding figures; user enters business information in online form (fig.22) and storing entered values of fields in an existing database and existing database copy);
- storing a second plurality of values in at least one second object, said second plurality of values being identical to said first plurality of values (Getchius, col. 44, lines 35-53; storing values of fields in an updated database copy);

- receiving modifications from a user to said data fields and storing said modifications in said at least one second object as current values (Getchius, col. 10, lines 33-41; col. 44, lines 35-53; and corresponding figures; changing values of the data fields and storing said changed values as current values on an updated database copy);
- comparing said first and second plurality of values to determine which data fields have initial values different from their current values (Getchius, col. 44, lines 8-53; comparing the values in existing database copy and updated database copy to determine the difference between two data sets); and
- creating a plurality of records identifying all data fields having initial values different from their current values as determined in step comparing (Getchius, col. 44, lines 8-34 and col. 56, lines 19 – col. 57, line 5; creating update records based on the resulting of difference between the two data sets).

However Getchius does not explicitly disclose the step of transmitting said plurality of records to a server, said plurality of records for use in updating data in a data storage device.

Bauer teaches updates performed by either client or servers are propagated to other side when a connection is established (Bauer, abstract).

It would have been obvious to a person of ordinary skill in the art at the time invention was made to have combined Bauer's teaching into Getchius to transmitting said plurality of records to a server for updating, since information is updated from either client or server.

Office Action dated October 21, 2004, pages 2-3.

#### **1.B Summary of Why the Proposed Combination Does Not Render Claim 1 Obvious**

The rejection of claim 1 rests, in part, on the incorrect assertion that Getchius shows the step of creating a plurality of records identifying all data fields having initial values different from their current values as determined in step (d). Although Getchius does show comparison of data sets for the purposes of updating those records that have changed, Getchius does not disclose creating records that identify the records that changed. Bauer does not cure the lack of disclosure in Getchius. Thus, the proposed combination does not result in the claimed inventions. Accordingly, the examiner has failed to state a prima facie obviousness rejection of claim 1.

In addition, the examiner has failed to state a proper motivation to combine the references. Although the examiner has stated a purported fact shown in Bauer, the examiner has not logically connected that fact to a motivation to combine the references. Thus, the examiner has failed to state a prima facie obviousness rejection of claim 1.

In addition, Bauer is non-analogous art to claim 1 and cannot be properly used to fashion an obviousness rejection of claim 1. Accordingly, the examiner has failed to state a prima facie obviousness rejection of claim 1.

In addition, Getchius teaches away from claim 1. The invention of claim 1 includes an extra step over the method shown in Getchius. No one of ordinary skill would propose adding extra steps in a process designed to increase the speed at which databases are updated. Thus, Getchius would motivate one of ordinary skill to avoid the method of claim 1. Accordingly, claim 1 is non-obvious over the proposed combination.

In addition, no one would be motivated to combine the references or to modify further the proposed combination. Getchius purports to represent a complete solution to the problem of updating large databases. Therefore, one of ordinary skill would not be motivated to alter the method to achieve the claimed inventions. Accordingly, claim 1 is non-obvious in view of the cited references.

In addition, the method of claim 1 is substantially different from the methods shown in Getchius and Bauer. Thus, no one of ordinary skill would have a reason or motivation to combine or otherwise modify the references. Accordingly, claim 1 is non-obvious.

#### **I.C The Examiner Has Failed To State a Prima Facie Obviousness Rejection of Claim 1**

##### ***I.C.1 The Proposed Combination Does Not Result in the Claimed Invention***

The proposed combination does not result in the method of claim 1. Therefore, the examiner has failed to state a prima facie obviousness rejection of claim 1. Claim 1 provides as follows:

1. A method of indicating when changes to values of data fields in a document have occurred, said method comprising the steps of:

- (a) storing a first plurality of values in at least one first object, said first plurality of values comprising initial values of a plurality of data fields in a document;
- (b) storing a second plurality of values in at least one second object, said second plurality of values being identical to said first plurality of values;
- (c) receiving modifications from a user to said data fields and storing said modifications in said at least one second object as current values;
- (d) comparing said first and second plurality of values to determine which data fields have initial values different from their current values;
- (e) creating a plurality of records identifying all data fields having initial values different from their current values as determined in step (d); and
- (f) transmitting said plurality of records to a server, said plurality of records for use in updating data in a data storage device.

The proposed combination does not show either step (e) or (f) of claim 1. Step (e) provides for the step of "creating a plurality of records *identifying* all data fields having initial values different from their current values as determined in step (d)." Getchius does not show this step.

The examiner contends that Getchius does show step (e), pointing to the following text:

Referring now to FIG. 53, at step 1400, the computation of the data update is performed using two complete sets of data from native sources. Generally, at step 1400, the latest set of data received such as from a data provider is submitted into the database and compared against the set that is in the existing database. All of the records in the data set are loaded in the following form. For comparison purposes, in the steps that follow there is a distinct record ID followed by a string where the string is all the fields from the record concatenated together for comparison purposes in steps that follow. In this particular instance record I.D.s are unique against the set and indexed. As a result of processing at step 1400, the delta or difference between the two data sets is produced. Each entry in this delta or difference is classified as an insert, delete, or update operation. A record is inserted into the existing database in which identifiers are in the new version of the data set but not in the existing database. All records which have identifiers in the existing database, but not in the new version, are slated for deletion from the existing database. Records in which identifiers are in both sets, but, however have associated strings that differ are considered

update records having data contents in the string that is updated for the corresponding identifiers. At step 1402, the update records which include inserts and update transactions are applied to the existing database. At step 1404, certain data post processing is performed as will be described further in the paragraphs that follow.

Getchius, col. 44, ll.8-34. In addition, Figure 53 of Getchius is as follows:

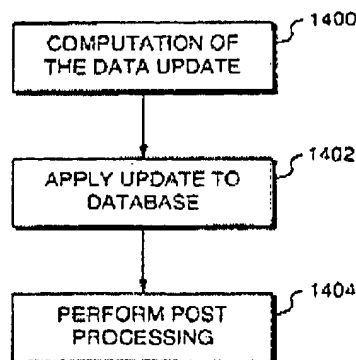


FIG. 53

Figure 53 shows the computation of data updates, applying the update to the database, and performing post-processing. The accompanying text describes producing a difference between two data sets. The accompanying text also states that each entry in the difference is classified as an insert, delete, or update operation. However, the accompanying text does not show creating a plurality of records *identifying* all data fields having initial values different from their current values as claimed. Instead, the actual differences are produced and the original database is then updated. Thus, the cited text and figure does not show step (e) of claim 1. Bauer does not cure the lack of disclosure, and the examiner failed to show how Bauer could cure the lack of disclosure. Accordingly, the proposed combination does not result in the invention of claim 1 and, as a result, the examiner has failed to state a prima facie case of obviousness of claim 1.

The examiner also points to additional text in Getchius for the proposition that Getchius shows step (e) of claim 1. Specifically, the examiner refers to the following text in Getchius:

Once the data modifications are incorporated into the Backoffice component, the data updates, including the updates to

advertisement data and other data associated with each business listing, may be propagated to the Front End Server component. The non-text or multimedia data, for example, as included in advertisements with image files, may be transferred to the Front End Server from the Backoffice using multimedia transfer techniques, as generally described in other sections of this description. The updates to the Primary Database included in the Front End Server may be communicated as a table of commands created in the Backoffice component and transferred, as by a network connection, to the Front End Server. Generally, in this embodiment, the table created in the Backoffice includes an application developed command language corresponding to the various types of record updates and modifications that may be included in this particular embodiment. Each of these commands may be further translated in the Front End Server into one or more actual database commands that perform the table operation. For example, an entry in the table of database update commands may be specified as follows:

COMMAND	RECORD #	OPTIONAL DATA
DELETE	1-5	

In this above example table, three fields of data may be included. A Command field specifies the type of data command. The Record #field identifies which records in the Primary Database this command applies. The Optional Data includes data that may be related to the specified command. For example, if the command were update, the data field may specify the data which is to be included in the records specified. In the above example, the command is to delete records 1-5. This single table command may be translated, for example, by software included in the Primary Database, into 5 database commands in accordance with the particular database software. The software which builds the table in the Backoffice and translates the commands into one or more database commands may be developed using a commercially available software system that is capable of communicating with the underlying database to perform the required operations.

It should be noted also that the entire table may be transferred from the Backoffice to the Front End Server, or it may be divided into sections and updates performed for each section. Additionally, each command may be sent as a separate message in other embodiments in accordance with the number of updates and other associated computer resources and costs for each data transaction. This may vary with implementation.

Getchius, col. 56, l.19 through col. 56, l.5.

Again, the cited text does not show step (e) of claim 1. The cited text provides that data updates may be propagated to the front end server component and that the updates to the primary database included in the front end server may be communicated as a table of commands created in the back office component. However, the cited text does not discuss a method of creating a plurality of records *identifying* all data fields having initial values different from their current values as claimed in step (e) of claim 1. Instead, at best one of ordinary skill might think that Getchius shows providing the actual values of data updates to the front end server. Thus, Getchius again does not show all of the limitations of claim 1. Again, Bauer fails to cure the lack of disclosure in Getchius and the examiner has failed to show how Bauer could cure the lack of disclosure. Accordingly, the proposed combination does not result in the claimed invention and, as a result, the examiner has failed to state a prima facie obviousness rejection of claim 1.

Furthermore, because Getchius does not show step (e) of claim 1, Getchius cannot show step (f) of claim 1. Step (f) states that the method includes "transmitting said plurality of records to a server, said plurality of records for use in updating data in a data storage device." Because Getchius does not show creating the records of step (e), Getchius, Bauer, and the combination of Getchius and Bauer cannot show transmitting the records to a server. Accordingly, the proposed combination does not result in the claimed invention and, as a result, the examiner has failed to state a prima facie obviousness rejection of claim 1.

#### ***I.C.2 The Examiner Failed To State a Proper Motivation to Combine the References***

The examiner has failed to state a proper motivation to combine the references. The examiner states that, "It would have been obvious ... to have combined Bauer's teaching into Getchius to transmitting said plurality of records to a server for updating, *since information is updated from either client or server.*" (Emphasis added.) However, the examiner's emphasized statement cannot serve as a proper motivation to combine the references. The mere fact that the prior art could be readily modified to arrive at the claimed invention does not render the claimed invention obvious; the prior art must suggest the desirability of such a modification. *In re Ochiai*, 71 F.3d 1565, 1570, 37

U.S.P.Q.2d 1127, 1131 (Fed. Cir. 1996); *In re Gorden*, 733 F.2d 900, 903, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). Merely stating that the modification would have been obvious to one of ordinary skill without identifying an incentive or motivation for making the proposed modification is insufficient to establish a *prima facie* case.

The examiner's statement purports to assert a fact regarding Bauer's teachings. Just because a fact exists does not mean that one of ordinary skill would (1) recognize that fact or (2) that the fact necessarily provides a motivation to combine the references. The examiner has failed to connect logically the purported fact to a motivation to combine the references. Furthermore, the examiner has not stated any motivation to combine the references. Accordingly, the examiner has failed to state a *prima facie* obviousness rejection of claim 1.

### ***I.C.3 Bauer Is Non-Analogous Art***

Bauer is non-analogous art to claim 1. Therefore, Bauer cannot be properly combined with Getchius to fashion an obviousness rejection of claim 1. Accordingly, the examiner has failed to state a *prima facie* obviousness rejection of claim 1.

The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d 1443, 1446 (Fed. Cir. 1992). In order to rely on a reference as a basis for rejection, the reference must be either in the applicant's field of endeavor or, if not, then reasonably pertinent to the particular problem with which the inventor was concerned. *Id.*

Bauer is in the field of systems for synchronizing shared data between computers. Claim 1 is in the field of methods of indicating when changes have occurred to data fields in objects and documents. The two fields are different. Thus, Bauer is not in the same field as claim 1.

Furthermore, Bauer is not reasonably pertinent to the problem to be solved. The problem to be solved in claim 1 is marking changed data fields in large databases as having been changed. Bauer is addressed to synchronizing shared data between computers. The two problems are quite distinct; thus, Bauer is not reasonably pertinent to the problem to be solved in claim 1.



Because Bauer is not in the same field as claim 1 and because Bauer is not reasonably pertinent to the problem to be solved, Bauer is non-analogous art under the standards of *In re Oetiker*. Accordingly, Bauer cannot be used as a reference when fashioning an obviousness rejection of claim 1. As a result, the examiner has failed to state a prima facie obviousness rejection of claim 1.

#### **I.D Claim 1 Is Non-Obvious Over Getchius and Bauer**

##### ***I.D.1 Getchius Teaches Away from Claim 1***

Getchius provides for a method of updating only certain fields in a large database. Getchius purports to provide sufficient disclosure to solve that problem by directly comparing two databases then updating the fields that have changed. In the method of claim 1, an extra step, step (e), is taken to create a record of all data fields that are different from the current values. One of ordinary skill would be motivated to avoid taking an extra step when updating a database, because doing so could slow down the process of updating a database. Because of ordinary skill would be motivated to avoid taking the extra step, Getchius teaches away from claim 1. Bauer provides no disclosure regarding why one of ordinary skill would take this extra step. Thus, when considered as a whole, the references together teach away from claim 1. Accordingly, claim 1 is non-obvious over the cited references.

##### ***I.D.2 Getchius Purports to Represent a Complete Solution to the Problem of Updating Large Databases***

Getchius purports to solve a problem with respect to updating large databases. Getchius purports to compare two databases and then update the data fields that have changed. If one of ordinary skill assumed that Getchius was able to perform this method, then one of ordinary skill would recognize that Getchius has solved the problem with respect to updating large databases. Thus, one of ordinary skill would have no reason or motivation to seek out additional means of solving the problem. Without a sufficient motivation to modify Getchius or the combination of Getchius and Bauer, it is not possible to state a motivation to combine the references or modify the combination in the

manner suggested by the examiner. Accordingly, claim 1 is non-obvious in view of the references when considered as a whole.

***I.D.3 Getchius and Bauer Are Sufficiently Different from the Method of Claim 1, and from Each Other, that No One of Ordinary Skill Would Be Motivated to Combine the References or to Further Modify the Proposed Combination***

Getchius and Bauer are sufficiently different from the method of claim 1 and from Each Other that no one of ordinary skill would be motivated to combine the reference or to modify further the proposed combination. Getchius is directed to a system for performing online data queries. Although as part of his disclosures Getchius does disclose an updating technique for synchronizing data, Getchius does not actually show or suggest steps (e) or (d) of claim 1. In addition, Bauer is directed systems for synchronizing shared data between computers in order to share data among many nodes on a computing system. Both Getchius and Bauer are primarily directed towards technologies that are distinct from the method of claim 1. Moreover, Getchius and Bauer are quite distinct from each other. Thus, no one of ordinary skill would be motivated to combine Getchius and Bauer in the manner suggested by the examiner. Accordingly, claim 1 is non-obvious in view of Getchius and Bauer when considered as a whole.

***I.E Rejection of Claims 1-5, 7-11, 13-17, 19-22, 24-30, 32-36, 38-43, 45-47, and 49-57***

Claim 1 is non-obvious in view of the cited references for the reasons given above. Claims 2-5, 7-11, and 13-15 depend from claim 1 and are thus non-obvious in view of the cited references. In addition, these claims contain additional limitations not shown or suggested by either reference.

For example, claim 5 states that, "wherein said plurality of records comprise a plurality of data field identifiers, and wherein each of said data field identifiers identifies one of said plurality of data fields in said document." The examiner contends that Getchius does show the limitations of claim 5, citing Getchius col. 44, ll. 8-53 (quoted above). However, as shown above, Getchius does not show creating a plurality of records *identifying* all data fields having initial values different from their current values.

Thus, Getchius cannot show that the plurality of records comprise a plurality of data field identifiers. Bauer fails to cure the lack of disclosure in Getchius. Accordingly, the examiner has failed to state a prima facie obviousness rejection of claim 5.

With respect to claims 16-17, 19-22, 24-30, 32-36, 38-43, 45-47, and 49-57, these claims all contain limitations similar to the limitations discussed above with respect to claim 1. Thus, the examiner has failed to state prima facie obviousness rejections of claims 16-17, 19-22, 24-30, 32-36, 38-43, 45-47, and 49-57. Similarly, these claims are non-obvious in view of Getchius and Bauer when considered as a whole.

The examiner has failed to state prima facie obviousness rejections of the claims. In addition, the proposed combination does not result in the claimed inventions and the proposed combination does not render the claims obvious. Therefore, the rejection of claims 1-5, 7-11, 13-17, 19-22, 24-30, 32-36, 38-43, 45-47, and 49-57 under 35 U.S.C. § 103(a) has been overcome.

## **II. Obviousness Rejection of Claims 6, 12, 18, 23, 31, 37, 44, and 48**

### **II.A Basis of Rejection of Claim 6**

The examiner has rejected claim 6 under 35 U.S.C. § 103 as being unpatentable over Getchius in view of Bauer as disclosed above, and further in view of Moore et al., System and Computer-Implemented Method for Providing Access to Host-Based Screen Applications Using Business-Centric Software Components, U.S. Patent 6,253,244 (Jun. 26, 2001). This rejection is respectfully traversed.

Regarding claim 6, the examiner states that:

Getchius does not explicitly disclose a Boolean value assigned to each of said data field identifiers to indicate whether said data field has an initial value different from its current value as determined in step comparison.

Moore teaches a Boolean value assigned to each of said data field identifiers to indicate whether said data field has updated (Moore, page 4, paragraph 50 and 52).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Moore's using Boolean into Getchius to mark data field identifiers that need to be updated, since this would have facilitated the updating of values of the data fields that need to be changed.

Office Action dated October 21, 2004, p.8.

**II.B The Proposed Combination Does Not Result in the Invention of Claim 6.**

Moore does not disclose that the plurality of records further comprise a Boolean value assigned to each of said data field identifiers as claimed. In fact, Moore never mentions using Boolean values or operators at all. Getchius and Bauer fail to cure the lack of disclosure in Moore. Thus, the examiner has failed to state a prima facie obviousness rejection of claim 1.

The examiner asserts that Moore does show the claimed limitation, referring to "page 4, paragraph 50 and 52." Applicants do not understand the reference, because page 4 of the patent is figure 3 and page 4 of the text are claims unrelated to claim 6. In addition, the paragraphs are not numbered. Thus, if the examiner decides to maintain the rejection, Applicants request that the examiner provide another citation to where Moore describes using Boolean values as claimed. However, Applicants cannot find any such reference in Moore. Thus, the examiner has failed to state a prima facie obviousness rejection of claim 6.

Furthermore, claim 6 depends from claim 1. Because Moore fails to cure the lack of disclosure in Getchius and Bauer with respect to creating records identifying all data fields having initial values different from their current values, the proposed combination again does not result in the method of claim 6. Thus, again, the examiner has failed to state a prima facie obviousness rejection of claim 6.

**II.C. The Examiner Has Failed To State a Proper Motivation to Combine the References**

The examiner states that, "It would have been obvious ... to have modified Moore's using Boolean into Getchius to mark data field identifiers that need to be update, since this would have facilitated the updating of values of the data fields that need to be changed." The examiner has stated an advantage of using the method of claim 6. However, the examiner has not provided a reason why one of ordinary skill would have recognized the advantage or why one of ordinary skill would have been motivated to combine the references. Thus, the examiner has failed to state a proper motivation to combine the references. Accordingly, the examiner has failed to state a prima facie obviousness rejection of claim 6.

In addition, the advantage cited by the examiner is an advantage to the claimed method as cited by Applicants. Given the total lack of disclosure in Moore regarding using Boolean values to identify fields, the examiner must have used impermissible hindsight when fashioning the obviousness rejection.

In determining obviousness, an applicant's teachings may not be read into the prior art. *Panduit Corp. v. Denison Mfg. Co.*, 810 F.2d 1561, 1575 n. 29, 1 U.S.P.Q. 1593, 1602 n. 29 (Fed. Cir. 1987) (citing need to "guard against hindsight and the temptation to read the inventor's teachings into the prior art"). A determination of the desirability of combining prior art references must be made without the benefit of hindsight afforded by an applicant's disclosure. *In re Paulsen*, 30 F.3d 1475, 1482, 31 U.S.P.Q. 1671, 1676 (Fed. Cir. 1994).

Because the examiner used applicants own teachings to fashion the obviousness rejection, the examiner has failed to state a prima facie obviousness rejection of claim 6. Accordingly, Applicants respectfully request that the rejection be withdrawn.

In addition, the motivation to combine Getchius and Bauer is flawed, as shown above. Thus, the examiner again has failed to state a prima facie obviousness rejection of claim 6.

#### **II.D. Claim 6 Is Non-Obvious in View of the Cited References**

Given the total lack of disclosure in the cited references regarding using Boolean values to indicate whether a data field has changed, there is no reason to conclude that one of ordinary skill would find claim 6 obvious when the references are considered as a whole. Accordingly, claim 6 is non-obvious.

In addition, claim 1 is non-obvious in view of Getchius and Bauer. Because Moore does not cure the lack of disclosure in Getchius and Bauer, and because claim 6 depends from claim 1, claim 6 is also non-obvious in view of the combination of Getchius, Bauer, and Moore when considered as a whole.

**II.E. Claims 12, 18, 23, 31, 37, 44, and 48**

Claims 12, 23, 31, 37, 44, and 48 all contain limitations similar to those contained in claim 6. Applicants assume that the reference to claim 18 is actually to claim 19 because claim 19 contains limitations regarding Boolean values and claim 18 does not. Because these claims are similar to claim 6, the examiner has failed to state prima facie obviousness rejections of these claims and these claims are non-obvious over the cited references. Therefore, the rejection of claims 6, 12, 19, 23, 31, 37, 44, and 48 under 35 U.S.C. § 103 has been overcome.

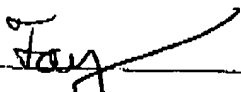
**III. Conclusion**

It is respectfully urged that the subject application is patentable over Getchius, Bauer, and Moore, and is now in condition for allowance.

The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

  
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